

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A method for transmitting information from an interrogator system to portable objects, wherein the information is transmitted through radio carrier wave amplitude modulation over several time intervals, called pulses, and with positional coding of these pulses, comprising:

applying ternary amplitude modulation, wherein a first amplitude level is used with a second amplitude level that is below the first amplitude level, and a third amplitude level that is above the first amplitude level, wherein the ternary amplitude modulation either passes from the first amplitude level to the second amplitude level or from the first amplitude level to the third amplitude level; and

forming two opposite-polarity pulses in a same pattern to provide positional coding, wherein a position concerned is that of a second pulse relative to a first pulse.

Claim 2 (Previously Presented): The method of claim 1, wherein the information is grouped into messages made up of a sequence of patterns and each of said patterns is associated with an information symbol and contains a code time area divided into N identical time units, each time unit of length T_c , where T_c at least equals a length of a pulse in any of the N time units in the code time area.

Claim 3 (Previously Presented): The method of claim 2, wherein a number N of time units within the code time area equals 2^M , where M is an integer, and the information symbol transmitted by each pattern comprises a binary word including M bits.

Claim 4 (Previously Presented): The method of claim 2, wherein each message is structured in frames, each frame is made up of a first pattern called a Start Of Frame (SOF) marker comprising:

a first time area divided into N time units;

a first pulse placed before the first time area; and

a second pulse, with the same polarity as the first pulse, and, placed within the first time area, wherein said Start of Frame (SOF) marker is followed by patterns associated with the information symbols of a message.

Claim 5 (Previously Presented): The method of claim 4, wherein the second pulse of the Start Of Frame (SOF) marker is always placed in a same time unit in the first time area.

Claim 6 (Previously Presented): The method of claim 5, wherein the second pulse of the Start Of Frame (SOF) marker is always placed in a last time unit in the first time area.

Claim 7 (Currently Amended): The method of claim 4, wherein the frame also comprises a last pattern called an End Of Frame (EOF) marker, said End Of Frame (EOF) marker includes a second time area with no pulse and a pulse placed before said second time area.

Claim 8 (Previously Presented): The method of claim 4, wherein a first guard time, a duration of which is a multiple of the time unit, is placed between the first pulse and the end of the first time area.

Claim 9 (Previously Presented): The method of claim 8, wherein a second guard time, a duration of which is a multiple of the time unit, is placed after the first time area.

Claim 10 (Previously Presented): The method of claim 4, wherein the time area is followed by a wait time in each pattern.

Claim 11 (Previously Presented): The method of claim 10, wherein a length of the wait time is modified for different patterns depending on transmission conditions.

Claim 12 (Previously Presented): The method of claim 10, wherein a length of the wait time is modified depending on a length of the messages that the portable objects retransmit.

Claim 13 (Previously Presented): A method as in any one of the preceding claims, wherein the first pulse is of negative polarity.

Claim 14 (Previously Presented): A method according to one of claims 1-12, wherein an amplitude modulation index is lower than 50%.